

## **FPO/FMP Comments and Feedback with Responses**

The following list includes Comments and Responses for the Floodplain Management Plan and Floodplain Ordinance Update, including written comments/responses from Open House in March 2016 and later.

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1

FMP-FPO Open House      March 7, 2016      COMMENT CARD

Please let us know your comments, suggestions, or questions regarding the proposed Tucson Floodplain Management Plan Draft or the draft of the City of Tucson's Floodplain Ordinance update. Thank you. Please use ONE card for each topic on which you are commenting, and check ☒ the relevant topic:

☒ Floodplain Management Plan      ☐ Floodplain Ordinance Update      ☐ Other

Name (optional) \_\_\_\_\_ Where did you hear about the Open House? \_\_\_\_\_

Would you be in support of a City of Tucson Stormwater Utility in the future? ☒ Yes ☐ No

*The City of Tucson needs a Stormwater utility to implement the TSMS and FMP to address the Stormwater needs of the City. It was disappointing to see the recommendations of TSMS not implemented because of the lack of funding.*

**RESPONSE:** The City of Tucson is now looking at the feasibility of a Stormwater Utility. Ultimately, the Mayor and Council would decide if another assessment would be accepted by their constituents and to see if a measure would be passed. A consultant has done some preliminary investigations. During the FMP, all feedback from the Open House poll showed all-in-favor of a Stormwater Utility.

2

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Name (optional) \_\_\_\_\_ Where did you hear about the Open House? Elizabeth

Would you be in support of a City of Tucson Stormwater Utility in the future? ☒ Yes ☐ No

*Good summaries and coverage of changes.*

*Would like more technical detail about why these changes were made either as supplemental information or maybe a separate session.*

**RESPONSE: References to Technical sections of TSMS can be found in FMP references section at end of the report. Keep in mind this phase of TSMS is a floodplain management plan and provides direction for City of Tucson Floodplain Management to assist in focusing on current flood, erosion, and other hazard needs, as well as prioritizing flood and erosion mitigation projects. This report is not a technical report like some other phases of TSMS. We did however add some sections on TSMS modeling in Chapters 1 and 2 of the FMP Report.**

3

FMP-FPO Open House

March 7, 2016

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☒ Floodplain Management Plan☐ Floodplain Ordinance Update☐ OtherName (optional) Maureen Pollack Where did you hear about the Open House? EmailWould you be in support of a City of Tucson Stormwater Utility in the future? ☒ Yes ☐ No

*Several years ago I worked with WRG and the COT to install water harvesting basins along the west boundary of my property which was [see staff for address]. In exchange for the right to install the basins the City required that I provide a path for pedestrians on any property east of the basins which I did. I understand from other neighbors that this practice is no longer allowed? The n/s roads in our subdivision Richland Heights East are major runoff of water. The City if anything should encourage this type of use and (I think be proactive and employ this system along Tucson, Jackson, Lind & Olsen from Fort Lowell to Prince in the City right-of-way. Has this been suggested or discussed?*

*It would certainly seem to help divert the dangerous waters when they make the roads unfavorable. Maureen*

**RESPONSE:** When submitting application for improvements in the floodplain, various criteria are involved when assessing whether the right-of-way can be used for basins. Some considerations include: maintenance responsibilities, frequency of maintenance, potential adverse impacts (including increased pavement maintenance costs due to close proximity of retained stormwater next to road), whether the basins are designed for un-attenuated flow conditions, soil characteristics, and other considerations. Number 4 of the FMP goal statement says the goal is to: "Reduce flood and erosion hazards, damage, and associated costs by increasing community awareness of water harvesting methodologies". Also the FMP Report was augmented on page 8 to help address this inquiry, and action items on pages 42 - 43 are already proposed to look at ways to reduce risk and improve urban flood areas. We will also continue to meet with your Neighborhood Association to discuss concerns and solutions.

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Name (optional) Eric Mackey      Where did you hear about the Open House? \_\_\_\_\_

Would you be in support of a City of Tucson Stormwater Utility in the future? ☐ Yes ☐ No

*Spoke with Elizabeth Leibold about Floodplain mapping and elevation certifications related to a townhome complex that I am the Homeowner Assn. Board President of. Very Very helpful and informative – Got the information that I needed – Thank you very much !!*

**RESPONSE: Comment acknowledged. If needing additional/other floodplain information, City of Tucson Planning and Development Services Department (PDSD) and/or Transportation Department (TDOT) Engineering staff can be contacted.**

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Name (optional) Bill O'Brien Where did you hear about the Open House? \_\_\_\_\_

Would you be in support of a City of Tucson Stormwater Utility in the future? ☒ Yes ☐ No

*I appreciate the effort for public outreach – keep at it! Stormwater/Flood Utility is a way to do funding keep it in the idea bank when there is a major/obvious reason for floodplain infrastructure.*

*I hope for good coordination with the City departments related to Stormwater/Flooding.*

**RESPONSE: Comment acknowledged – Stormwater Utility is being considered.**

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Name (optional) Scott Robidoux Where did you hear about the Open House? \_\_\_\_\_

Would you be in support of a City of Tucson Stormwater Utility in the future? ☐ Yes ☐ No

*Hi Elizabeth,*

*Here is our proposed language for the Floodplain Ordinance Update:*

*Critical airport facilities, (only to include the following: Air Traffic Control Tower, electrical vaults, emergency generators, police station, fire station, and fueling stations);*

*Thank you,*

*Scott Robidoux*

*Airport Planner*

*7250 South Tucson Boulevard, Suite 300*

*Tucson, AZ 85756*

*Office: (520)-573-4811*

**RESPONSE:** See other airport response below.

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Name (optional) Tucson Airport Authority Where did you hear about the Open House? \_\_\_\_\_

Would you be in support of a City of Tucson Stormwater Utility in the future? ☐ Yes ☐ No

*Good morning,*

*Tucson Airport Authority (TAA) appreciates the opportunity to comment on the City of Tucson's update to the Floodplain, Stormwater, and Erosion Hazard Management Ordinance. TAA believes the definition for Airport Facilities, which is under the Critical Infrastructure category, is too broad. TAA believes that this broad definition of Airport Facilities will negatively impact normal development at Ryan Airfield and Tucson International Airport. TAA is proposing a tentative list of proposed Critical Airport Facilities to better meet the intent of the executive order. Please note that this list is not exhaustive and is only being used as an initial framework for Critical Airport Facilities. Airport Facilities not specifically called out as Critical should fall under normal development requirements.*

*TAA Preferred Definition for Critical Airport Facilities*

- 1) Air Traffic Control Tower*
- 2) Electrical Vaults*
- 3) Emergency Generators*
- 4) Police Station*
- 5) Fire Station*
- 6) Fueling Stations*

*TAA appreciates the opportunity to participate in the process. TAA requests a phone call with TAA and City of Tucson personnel to further discuss this matter and develop a clear and appropriate definition of Critical Airport Facilities. Please let us know if you have any questions or need additional information.*

*Thank you*

*Scott Robidoux*

*Airport Planner*

**RESPONSE: Ordinance has been updated to reflect this request. Definition now reads:**

**Critical Facility means any new and substantially improved public or private facility, or any addition to an existing public or private facility, that is used for public emergency management. Critical facilities shall be designed and constructed to be located outside of FEMA SFHA and other 100-year jurisdictional floodplains, and provide a minimum lowest floor elevation set at or above 500-year WSEL, or the RFECF = BFE +2-ft. Critical facilities include: critical airport facilities (air traffic control towers, electrical vaults, emergency generators, police station, fire station, and fueling stations), emergency incident command centers, other emergency facilities including fire stations, police departments; utility facilities; nursing homes or elderly care facilities; hospitals; storage facilities that have hazardous materials; and schools or day care facilities. Other critical facilities may be designated as determined by City Administration (Department Directors with City Manager or designee's concurrence).**

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☐ Floodplain Management Plan☒ Floodplain Ordinance Update☐ OtherName (optional) Paul Baughman Where did you hear about the Open House? workWould you be in support of a City of Tucson Stormwater Utility in the future? ☒ Yes ☐ No*Require 100% onsite retention of 100-year storm in critical and balanced basins.*

**RESPONSE:** If the City of Tucson were to change the retention requirements to require 100% onsite retention of the 100-year storms for both the Balanced and Critical Basin Management areas, there would be an increase in potential ponding water in areas with caliche and Hydrologic soil types C&D, thereby increasing probably that the basins would not meet the required 12 hour or 24 hour drain down times. Then developers would have to pay their consultants to re-engineer the basins to drain which would likely be very difficult since the retention system likely is too deep to provide positive gradient to drain out the standing water (since retention systems allow for very deep basin designs compared to detention). The likelihood of basin failures would be high. The City is looking at each watershed to consider increase in detention for those areas that may have increased flooding issues downstream since detention mitigates the mosquito issue.



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Name (optional) \_\_\_\_\_ Where did you hear about the Open House? \_\_\_\_\_

Would you be in support of a City of Tucson Stormwater Utility in the future? ☒ Yes ☐ No

*City staff – excellent presentation – subject matter complex and staff was able to convey the information so it was understandable by the layperson without talking down. Appreciated the information.*

**RESPONSE: Comment acknowledged.**

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Would you be in support of a City of Tucson Stormwater Utility in the future? ☒ Yes ☐ No

*Well organized open house. Lots of good information.*

**RESPONSE: Comment acknowledged. Assistance in organizing the Open House came from various City staff members from different departments and our consultant. Floodplain Ordinance update had assistance from the State who sent down staff to meet with the City to assist in reviewing our proposed updates so that the code reflected the State Model Ordinance as best as possible for the City of Tucson.**

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Name (optional) \_\_\_\_\_ Where did you hear about the Open House? \_\_\_\_\_

Would you be in support of a City of Tucson Stormwater Utility in the future? ☒ Yes ☐ No

*City needs to explain how these two documents help with the Community Rating System for the City of Tucson. Need to educate people in the City (staff and residents) about how successful detention systems are for both water harvesting and basins, and how retention and dry wells have a long history of failure due to sediment buildup, harder soils, more hydrologic soil types C & D in the Tucson area, more clayey less-granular soils, and more incidents of caliche. Detention lowers risks for mosquito-borne illness, ensure successful development by functioning basin, while still providing opportunity for some recharge and water harvesting. Consider upgrading non-designated watersheds to Critical Basin Management status or Balanced Basin Management status to increase detention requirements for those watersheds with downstream flooding issues.*

**RESPONSE: Chapter 1 includes discussion of Tucson's approach to runoff – allowing for flow to continue through the systems.**

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FMP-FPO Comments

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☒ Floodplain Management Plan

☐ Floodplain Ordinance Update

☐ Other

Name (optional) BJ Cordova

*(Comments included formatting and other content items for the FMP Report.)*

**RESPONSE: Consultant addressed all of the comments and comments were incorporated in the FMP Report.**

13FMP-FPO Comments

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☒ Floodplain Management Plan☐ Floodplain Ordinance Update☐ OtherName (optional) Kat Balster

*I work with a company called Riverside Technology and we are trying to improve flood response and planning. I see that the City of Tucson is a member of the Community Rating System with a ranking of six; and your community has had some flood issues in the recent past. I'm not looking to sell anything, but since your community has shown motivation to be flood prepared and has experience with flooding, we'd love to ask you a few questions to help us make sure we are building something that is useful.*

**RESPONSE: City of Tucson is willing to share information regarding our FMP and our approach to flood response and planning. Please call to discuss further.**

14FMP-FPO Comments

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☒ Floodplain Management Plan☐ Floodplain Ordinance Update☐ OtherName (optional) Joanne Hershenhorn

*Thank you for providing the opportunity to review the draft FMP. The layout looks good, and I think this is a good start on documenting Tucson's flood hazard situation and how it meshes with FEMA programs. There's a lot of good information in here. Pulling it all together like this represents a lot of good work, and I would like to acknowledge that effort – good job!*

*At this time, I have only completed a partial review of the document. I read Chapters 1 and 2 in some detail, looked through chapters 3 & 4, and glanced at the rest of the document. Since the bulk of the significant work on the FMP is discussed in beginning with Chapter 5, the comments below are very preliminary.*

- 1) *General comment: I suggest minimizing repetition throughout the report, to make it an easier read. I also suggest looking for opportunities to shorten the report as much as possible.*
- 2) *General comment: Have you considered using only local photos? (Figures 14 on p. 29/42 and 15 on p. 31/42 clearly aren't from here...)*
- 3) *Executive Summary – I think these are useful and usually see them as stand-alone report segments that precede Chapter 1. They should introduce readers to the flow of the report, and summarize the most important report aspects and findings. I think you've got a good start, and recommend adding key report findings – the seven hazard categories, summary of flood damaged buildings/claims & repetitive loss properties, summary of action p, and recommended next steps (including adoption, updates, etc).*
- 4) *Chapter 1: Introduction – Much of the information in Chapter 2 and the beginning of Chapter 3 (prior to the subsection titled Report Review) could be placed in an introductory chapter. The website and public involvement information in Chapter 3 could also be summarized in the Introduction, with more detailed information in an appendix. The CRS FMP steps could also be in the introduction. You could also include the information on flood damage claims & repetitive loss properties from Chapter 5 (p. 29/42) in here (this provides tangible evidence that individuals in the community have experienced personal flood loss).*
- 5) *Chapter 2: I think summarizing TSMS and work that has been completed to implement TSMS is very helpful, since the FMP builds on TSMS. I suggest including this information in Chapter 2, and maybe calling it something like, Summary of Previous Studies, Reports and Projects, with introductory text explaining that the focus is on TSMS-related work.*
- 6) *Chapter 3: Assessing the Hazard – Most of the information from the brainstorming session found in Chapter 4 might work better in an appendix. I suggest summarizing the most important information from those sessions in this chapter – the seven categories, brief explanations of each, the information in the first part of Chapter 5 (before the subsection Review of All Damaged Buildings/Flood Insurance Claims (HAZUS), and the prioritization of hazards.*

- 7) *Also, combining chapters 6 & 7 into one chapter - as setting goals and reviewing possible activities based on those goals seem related – might be helpful.*
- 8) *Chapter 8 – I haven't read Chapter 8, but offer the following, based on a quick glance. I am confused as to why the Action Plan currently found at very end of the report, after the Appendixes, isn't in Chapter 8? Isn't that the most important thing in this report? Should the Pima County HMP information be in an Appendix?*
- 9) *Chapter 9 – I think the terminology "maintenance strategy" could be misleading. Maybe it could be called something like Plan Adoption and FMP Updates??*
- 10) *The Reference section is good – I usually see these as stand-alone sections at the end of the report, and not as a Chapter (like the Executive Summary).*
- 11) *Also, I think Appendixes is the more common spelling?*
- 12) *I was surprised to find the Action Plan after the Appendixes and not in Chapter 8 (see the comment above). Again, isn't it one of the most important items in the report? .*

**RESPONSE:** Consultant and staff went over these comments and updated the FMP report as needed to address some of the comments.

15FMP-FPO Comments

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☒ Floodplain Management Plan☐ Floodplain Ordinance Update☐ OtherName (optional) Kieran Sikdar*(Comments included asking whether waterharvesting was portrayed in a positive light within the FMP Report.)*

**RESPONSE: Waterharvesting was included in Action Items in Report. For floodplain management purposes, waterharvesting must be designed in a sustainable way so that all aspects of waterharvesting design are considered including: safe conveyance as a priority, and maintenance issues are addressed.**



16FMP-FPO Comments

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☒ Floodplain Management Plan      ☐ Floodplain Ordinance Update      ☐ Other

Name (optional) various Tucson residents (verbal comments)

*Residents stated that their main concerns regarding flooding issues in the City of Tucson pertain to having necessary access on the roadways and having power. They stated that they were concerned about safe access across bridges over the regional watercourses, having access through flooded streets, and what they needed to do during a power outage when lightning strikes and electrical power systems go down.*

**RESPONSE:** Regarding electrical outages, this was discussed in the FMP Report on pages 6, 27, and 44. The City of Tucson's FMP Committee determined that public conveyance systems were a top priority. Action items include looking at improvements to the public streets, our main conveyance system for flood stormwater runoff as well as increased public outreach to educate the public regarding safety tips and City programs.

17FMP-FPO Comments

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☐ Floodplain Management Plan      ☒ Floodplain Ordinance Update      ☐ Other

Name (optional) City of Tucson Attorney Office

*Staff received various comments in several emails regarding compliance with ARS 48-3609E, ARS 48-3610, ARS 48-3646, ARS 9-831/832, SB1598, SB1298, and the need to clarify floodplain and erosion hazard permitting procedures, variance requests, convening Stormwater Advisory Committee or Stormwater Technical Advisory Committee, and holding public hearings.*

**RESPONSE: Sections 26-18 for Public Hearings, Section 26-13 for Amendments, and 26-12 for Appeals and Variances were updated to better clarify requirements to meet current regulations. The time frame for permits will be updated and posted on City websites.**